

Remarks

Claims 1-3, 5-6, 8-17, 19-29, 31-35, 53, 55, and 57-76 are pending in the application. Claims 36-52 have been withdrawn from consideration and canceled. No new matter has been added by virtue of this amendment. Reconsideration of the application as amended is requested.

Claim Rejections--35 U.S.C. § 102(b)

The Examiner rejects claim 1-3, 5, 53-57 under 35 U.S.C. § 102(b), as being anticipated by Adler et al (5,381,090). The Examiner states that "Adler discloses a displacement sensor for measuring the position of conductive or ferrous material within a coil, a magnetically permeable member adjacent the coil, and a circuit; measuring means for measuring the resistance of the single coil inductance transducer (coil) wherein the circuit adjusts output voltage of the coil to compensate for a change in temperature in the coil. The change in temperature of the sensor is incorporated in the output of the sensor. (note eg FIGS. 7, 8, 10, col. 2, lines 36+; col. 5 lines 45+; claim 1)."

However, applicant would respectfully ask the Examiner to consider that while Adler teaches measuring temperature using a coil there is no teaching or suggestion to use the temperature measurement to correct any other measurement that may vary with temperature.

Ader also discloses a speed sensor. While his device can measure both speed and temperature there is no teaching or suggestion to use the temperature measurement to correct any error in the speed measurement. And the temperature measurement itself may vary as the temperature changes but there is no disclosure of the idea of correcting the temperature measurement for variation in temperature. There is no teaching or suggestion to use the temperature measurement for any other purpose except to provide the temperature.

Claim 1, as amended provides:

1. (Currently amended) An electronic device, comprising a sensor sensitive to position of a conductive or ferrous material, said sensor comprising a single coil inductance transducer, a temperature measurement circuit for providing a temperature output derived from said sensor, a position measuring circuit for measuring position of said conductive or ferrous material, and a voltage controlled gain adjusting device, wherein said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said position

1024-038

11

09/911,959

measuring circuit to provide temperature compensated sensor data independent of temperature of said conductive or ferrous material, wherein said temperature measurement circuit uses a signal derived from resistance of said single coil inductance transducer to provide said voltage proportional to temperature.

Adler does not teach or suggest "said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said position measuring circuit," as provided in claim 1.

Claim 13, as amended, provides:

13. **An electronic device, comprising a single coil inductance transducer having a single coil and a magnetically permeable member that extends in said single coil, said device further comprising a temperature measurement circuit, a position measuring circuit, and a voltage controlled gain adjusting device, wherein said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said position measuring circuit to compensate for a change in temperature in said single coil and in said member.**

As to independent Claim 13, Adler does not teach or suggest the idea of "said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said position measuring circuit to compensate for a change in temperature in said single coil and in said member." Adler has no adjusting for a change in temperature at all. Adler merely measures the temperature with a coil but there is no teaching or suggestion as to using that measurement.

Claim 24, as amended provides:

24. **An electronic device, comprising a single inductor, a conductive or magnetically permeable member coupled to said single inductor, a temperature measurement circuit, an inductance measuring circuit, and a voltage controlled gain adjusting device, wherein said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said inductance measuring circuit to provide an adjusted output voltage independent of temperature of said single inductor and temperature of said conductive or magnetically permeable member.**

As to independent Claim 24, Adler does not teach or suggest, "said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said inductance measuring circuit to provide an adjusted output voltage independent of temperature of said single inductor and temperature of said conductive or magnetically permeable member." Adler merely measures the temperature with a coil but there is no teaching or suggestion as to using that measurement.

Claim 53, as previously amended provides:

53. A device comprising a single component, a temperature measurement circuit, a first parameter measuring circuit, and a voltage controlled gain adjusting device, wherein said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said first parameter measuring circuit to make adjusted output voltage of said of said first parameter measuring circuit independent of change in temperature with time.

As to independent Claim 53, Adler does not teach or suggest, "wherein said temperature measurement circuit provides a voltage proportional to temperature to said voltage controlled gain adjusting device to adjust output voltage of said first parameter measuring circuit to make adjusted output voltage of said of said first parameter measuring circuit independent of change in temperature with time." Adler has no correcting of a first parameter for a change in temperature. Adler merely measures the temperature with a coil but there is no teaching or suggestion as to using that measurement.

Thus, the rejection of the claims under 35 U.S.C. § 102(b), as being anticipated by Adler et al has been traversed.

The Examiner has made of record US Patent 5,332,966 to Berberich but has not rejected the claims based on this reference. Berberich teaches a time based adjustment. There is no teaching or suggestion to provide a voltage from the temperature measurement to make the adjustment using a voltage that varies with temperature as provided in the independent claims of this application, as amended.

Conclusion

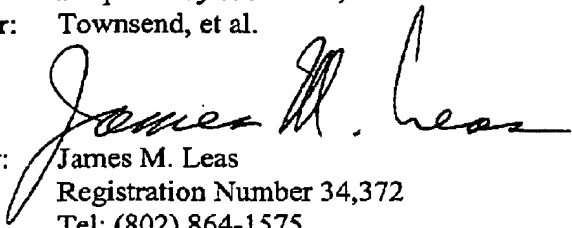
It is believed that all the claims remaining in the application are in condition for allowance. Therefore, applicant respectfully requests favorable reconsideration. If there are any questions please call applicant's attorney at 802 864-1575.

1024-038

13

09/911,959

Respectfully submitted,
For: Townsend, et al.

By: 
James M. Leas
Registration Number 34,372
Tel: (802) 864-1575

James M. Leas
37 Butler Drive
S. Burlington, Vermont 05403

1024-038

14

09/911,959